OPERATING ACCESSORIES

Lionel manufactures a number of realistic operating accessories which duplicate the activity of real railroad equipment. All of these accessories depend on the transformer for their operating power and work on voltages ranging from 10 to 14 volts, depending upon the accessory itself. The higher portion of this range is generally required when the motor and the working parts of the accessory are new, but the voltage can usually be decreased as the mechanism becomes worn in. It is good practice to run any Lionel operating accessory on the lowest possible voltage. In this way you will prevent unnecessary wear and prolong the life of the equipment.

While variable voltage is supplied to the track for controlling the speed of the train, the majority of operating accessories should be connected directly to the fixed voltage terminals of the transformer. Select that combination of terminals which furnishes the proper voltage for operating your accessory. (See page 34). When using a VW or ZW Multi-Control transformer, where the voltage for operating accessories as well as that for running trains may be set at any desired point, turn the voltage control to the lowest voltage where you get satisfactory operation.

The number of operating accessories which can be used with your model railroad is limited only by the wattage rating of your transformer as discussed in the section on Power Supply. In most cases, however, since these accessories consume power only when in actual operation, many more of them can be operated on a transformer than the total of their wattages would indicate.

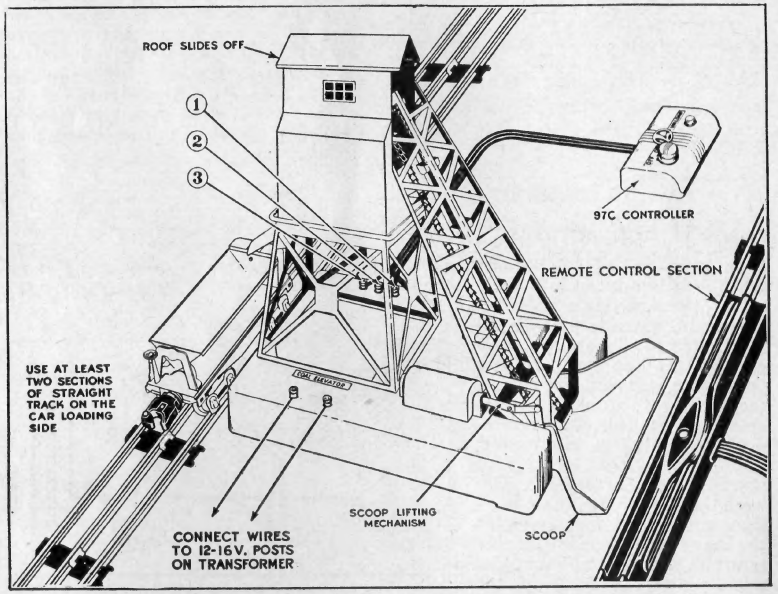

Figure 48—Installation for No. 97 Coal Elevator

No. 97 COAL ELEVATOR

Lionel No. 97 Coal Elevator is installed between two lines of track approximately 14 inches apart with a remote control section inserted in one of the lines. See Figures 48 and 49. Lionel artificial coal can then be unloaded from dump cars into the automatic tilting scoop of the elevator where it is picked up by the bucket conveyor and carried to the storage bin on the top of the elevator. The car is then rerouted beneath the delivery chute on the other side of the elevator and there reloaded. No. 97C Controller supplied with the elevator has a button for controlling the gate of the elevator storage bin and an "On-Off" switch for controlling the motor-driven bucket conveyor.

WARNING

Only Lionel Artificial Coal should be used in the accessory. Any other material may clog or bind the conveyor belt.

The motor of the Coal Elevator should be lubricated periodically paying particular attention to the ends of the armature shaft. However, the sprockets or any other part of the conveyor should never be lubricated or pieces of coal will stick to it and jam the conveyor mechanism.

No. 164 LUMBER LOADER

Similar in operation to No. 97 Coal Elevator is No. 164 Lumber Loader illustrated in Figure 50. The Lumber Loader is placed in a layout similar to that used for the Coal Loader. It is especially appropriate for use with remote control Lumber Cars. These cars will unload lumber into the bin on one side of the Loader. The lumber is then picked up by the conveyor chain and transported to the upper storage platform. Pressing the "Unload" button on 97C Controller will release stored lumber into waiting lumber cars. Like the Coal Elevator, the Lumber Loader should be connected to fixed voltage transformer posts furnishing 12-16 volts.

Figure 49—Typical "O" Layout for Coal Elevator or Lumber Loader

TRACK NEEDED: 13 sections of straight track, 14 sections of curved track, 1 pair of switches, 1 Remote Control Section.

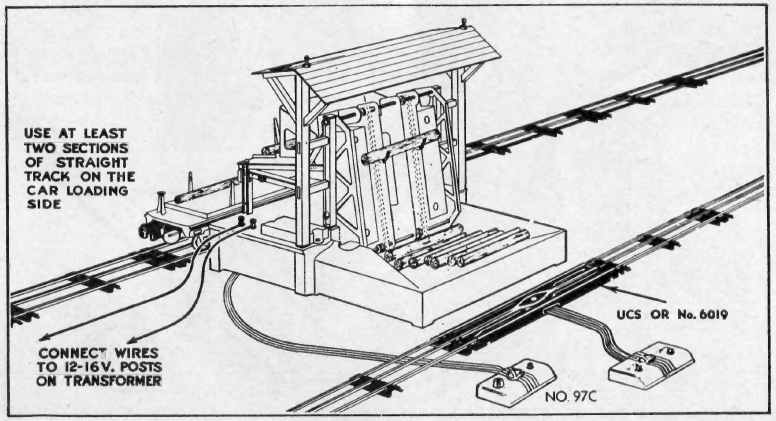

Figure 50—How to Install No. 164 Lumber Loader